


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : SOEPENBERG et al.
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Group Art Unit : 2616
Examiner : Dmitry Levitan

**APPEAL BRIEF
On Appeal from Group Art Unit 2616**

Date: June 22, 2007

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I. REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., the assignee of record.

II. RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

- a) Claims 1-8 and 10-14 are pending. Claims 1, 3, 5, and 7 being independent.
- b) Claims 1-8 and 10-14 stand rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

The claims listed in section "VIII. Claims Appendix" of this Appeal Brief correspond to the claims submitted and amended in Appellant's response of December 19, 2006. These claim amendments were entered by the Examiner as indicated in the final Office Action of January 24, 2007. No claim amendments have been submitted following Appellant's response of December 19, 2006.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention, as recited in claim 1, is directed to a transmission system (fig. 1, page 3, lines 20-25) for transmitting a multiplex signal (fig. 1; page 3, lines 20-30) from a transmitter to a receiver (fig. 1, page 3, line 30 to page 4, line 9), said multiplex signal

comprising a carousel having a plurality of modules (page 3, lines 20-32) each comprising at least one object that includes executable code (page 4, lines 10-30), the receiver comprising extracting means for extracting objects from the multiplex signal (fig. 1, 14 & 16; page 4, lines 3-24), wherein the extracting means (fig. 1, 16; page 4, lines 10-24) are embodied so as to extract the objects in dependence on module related information present in the multiplex signal (page 4, line 25 to page 5, line 22; page 6, lines 3 to page 7, line 12).

The claimed invention, as recited in claim 3, is directed to a transmitter (fig. 1, 10; page 3, lines 20-28) for transmitting a multiplex signal (fig. 1; page 3, lines 20-30), said multiplex signal comprising a carousel having a plurality of modules (page 3, lines 20-32), the modules each comprising at least one object that includes executable code (page 4, lines 10-30), wherein the transmitter is embodied so as to insert in the multiplex signal module related object extraction information (page 6, line 23 to page 7, line 12).

The claimed invention, as recited in claim 5, is directed to a receiver (fig. 1, 14; page 3, lines 20-28) for receiving a multiplex signal (page 3, lines 29-33), said multiplex signal comprising a carousel having a plurality of modules (page 3, lines 20-32), the modules each comprising at least one object that includes executable code (page 4, lines 10-30), the receiver comprising extracting means (fig. 1, 16; page 4, lines 3-24) for extracting objects from the multiplex signal, wherein the extracting means are embodied so as to extract the objects in dependence on module related information present in the multiplex signal (page 4, line 25 to page 5, line 22; page 6, lines 3 to page 7, line 12).

The claimed invention, as recited in claim 7, is directed to a multiplex signal (fig. 1, 12; page 3, lines 20-32), embodied in a computer readable medium (fig. 1, 14 or storage device 19; page 4, lines 14-24), comprising a carousel having a plurality of modules (page 3, lines 20-32),

the modules each comprising at least one object that includes executable code (page 4, lines 10-30), wherein the multiplex signal further comprises module related object extraction information (page 4, line 25 to page 5, line 22; page 6, lines 3 to page 7, line 12).

The claimed invention, as recited in claim 12, is directed to a transmission system according to Claim 1, wherein the module related object extraction information is contained in the userInfo field of a DSM-CC DownloadInfoIndication message (fig. 2; page 5, line 23 to page 6, line 2; page 6, line 29 to page 7, line 12).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claim 12 is properly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

Whether claims 7 and 8 are properly rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Whether claims 1-8, 10, 11 and 13 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over Wasilewski (US 5,420,866) in view of Kostreski et al. (US 5,734,589) (hereinafter Kostreski).

Whether claim 14 is properly rejected under 35 U.S.C. §103(a) as being unpatentable over Wasilewski in view of Kostreski in further view of Cobbley (US 5,614,940).

VII. ARGUMENT

Appellant respectfully traverses the rejections in accordance with the detailed arguments set forth below.

A. Claim 12 is not properly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

According to the requirement the specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention (emphasis added).

Appellants respectfully submit that the Office has not established a prima facie case setting forth on the record why the claimed invention does not comply with the enablement requirement, as is required by MPEP 2163.

The Examiner argues that the disclosure (6:29-7:2) does not describe the message structure, generation and destination and does not teach how to insert/extract information into/from user Info field of a DSM-CC DownloadInfoIndication message, as the message structure, generation and destination are not properly disclosed.

Appellants disagrees since one skilled in the art would recognize and understand the structure of a DSM-CC downloadInfoIndication message. As pointed out in Appellants' specification one skilled in the art knows the standards from ISO/IEC International Standard 13818-6, "MPEG-2 Digital Storage Media Command and Control" July 12, 1996. As pointed out in the background of Appellants' specification this known standard describes to the extent practical the state of the prior art, which also provides an indication of the level of one skilled in the art.

Appellants' contend that the level of one skilled in the art includes the knowledge of the message structure, generation and destination and taken in conjunction with the disclosure in

Appellants' specification, page 6, line 29 through page 7, line 2 one skilled in the art would have enough detail about the structure and operation of the elements associated with the claimed features in order for the skilled artisan to make and use the invention.

It is submitted that the Examiner has failed to review the entire application to understand how Appellants provide support for the claimed invention and has failed to appreciate the level of one skilled in the art. The Examiner is required to consider the claims and the entire specification, the specific embodiments, and figures, to understand how applicant provides support for the various features of the claimed invention, and further consider the level and knowledge of one skilled in the art.

As pointed out in the MPEP 2163 an element may be critical where those of skill in the art would require it to determine that applicant was in possession of the invention. Compare *Rasmussen*, 650 F.2d at 1215, 211 USPQ at 327 ("one skilled in the art who read Rasmussen's specification would understand that it is unimportant how the layers are adhered, so long as they are adhered") (emphasis in original), with *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1206, 18 USPQ2d 1016, 1021 (Fed. Cir. 1991).

The analysis of whether the specification complies with the written description requirement calls for the examiner to compare the scope of the claim with the scope of the description to determine whether applicant has demonstrated possession of the claimed invention. Such a review is conducted from the standpoint of one of skill in the art at the time the application was filed (see, e.g., *Wang Labs. v. Toshiba Corp.*, 993 F.2d 858, 865, 26 USPQ2d 1767, 1774 (Fed. Cir. 1993)) and should include a determination of the field of the invention and the level of skill and knowledge in the art.

Information which is well known in the art need not be described in detail in the specification. See, e.g., *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1379-80, 231 USPQ 81, 90 (Fed. Cir. 1986).

Appellants submit the Examiner has failed to set forth the conditions required to provide a *prima facie* case why the claimed invention does not comply with the enablement requirement, as is required by MPEP 2163. For at least the foregoing reasons, the rejections should be reversed.

B. Claims 7 and 8 are not properly rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

1. Claims 7 and 8

With regard to independent claim 7 and dependent claim 8, Appellants respectfully submit that the Office has not established a *prima facie* case setting forth on the record why the invention is not eligible subject matter, as is required by MPEP 2106 IV.

In the final Office Action, the Examiner has simply presented a conclusory statement that the “claimed signal” is not one of the four types of statutory subject matter. There is no analysis setting forth any reasoning as required by the Interim Guidelines or MPEP to determine patent eligibility. The Examiner does not consider the claimed multiplex signal as being embodied on a computer readable medium.

The analysis for determining patent eligible subject matter under §101 is described in the USPTO Interim Guidelines for Subject Matter Eligibility (Guidelines) as a 4 step process:

1. Does the claimed invention fall within one of the four **statutory categories**?
2. Does the claimed invention fall within a **judicial exception**?
3. Does the claimed invention provide a **practical application**?

4. Does the claimed invention **wholly preempt** all substantial applications of a judicial exception?

All four steps must be applied to each and every claim to form a complete analysis. In the final Office Action, paragraph 6, the Examiner simply argues that the claims are not one of the four types of statutory subject matter without applying the 4 step process.

Even if the claim does not appear to fall within a statutory category of invention, the analysis under §101 must continue to determine if the claim recites a practical application under step 3. The Examiner has not provided any analysis as required by the MPEP.

Step 3 of the analysis requires that even if the claim does not appear to fall within a statutory category of invention, the analysis under §101 must continue to determine if the claim recites a practical application. Likewise, even if a claim recites a judicial exception, the analysis must continue. A claim is directed to a practical application when there is either a physical transformation or when a useful, concrete and tangible result is produced. The final Office Action provides no such analysis.

While the guidelines state that signals, *per se* are not included in one of the statutory categories of invention, Appellants claim a multiplex signal, embodied in a computer readable medium. Examples of a computer readable medium are described in the specification, for example fig. 1, 14 or storage device 19; see page 4, lines 14-24. The computer readable medium is a physical structure which provides the functional descriptive material in usable form to permit the functionality to be realized with a computer, for example a receiver or set top box 14.

The Interim Guidelines provide that:

Functional descriptive material claimed in combination with an appropriate computer readable medium to enable the functionality to be realized is patent eligible subject matter if it is capable of producing a useful, concrete and tangible result when used in the computer system. Compare *Warmerdam* to *In re Lowry* 32

USPQ2d 1031 where a memory with a data structure that increased computing efficiency was patentable.

The computer readable medium must be physical structure which provides the functional descriptive material in usable form to permit the functionality to be realized with the computer. A program product which does not explicitly include such a medium, a program per se, a signal or other type of transmission media that fails to include the hardware necessary to realize the functionality (e.g., a transmitter or a receiver), and a piece of paper with the functional descriptive material written on it are all examples of media which are not believed to enable the functionality to be realized with the computer.

Appellants' submit the claimed invention is statutory and recites a practical application.

Furthermore, the Examiner, on page 8 of the final rejection, points to pages 55-57 of the Interim Guidelines as indicating that the claim is not statutory because the computer readable medium is not referred to in the body of the claim, but only in the preamble. However, Appellants could find no such requirement in the MPEP or Interim Guidelines.

For at least the foregoing reasons, the Examiner has not met the burden of establishing a *prima facie* case setting forth on the record why the invention is not eligible subject matter under 35 U.S.C. §101 and the rejection of claim 7 should be reversed. Claim 8 depends from claim 7 and is likewise directed to statutory subject matter.

C. Claims 1-8, 10, 11 and 13 are not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Wasilewski (US 5,420,866) in view of Kostreski (US 5,734,589).

1. Claim 1

It is respectfully submitted that the Examiner failed to establish a *prima facie* case of obviousness. The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. 103 is set forth in MPEP § 706.02(j):

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references

when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

If the above-identified criteria are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s) and the rejections should be reversed. In this case the combination of references fail to meet any of the three tests.

In the Office Action, bottom of page 4, the Examiner conceded that Wasilewski was deficient in teaching or suggesting the feature of “a carousel having a plurality of modules each comprising at least one object...,” as recited in Appellants’ claim 1.

To cure the above deficiency, the Examiner turned to Kostreski for allegedly disclosing the above feature of Appellants’ invention. For such disclosure, the Examiner relied on Kostreski’s col. 5, line 33 through col. 6, line 6. In addition, in the “Response to Arguments” section, the Examiner points to col. 4, lines 39-47 of Kostreski (see page 9, final Office Action) as also showing the features.

Turning first to col. 4, lines 39-47 of Kostreski, there is a description of a digital entertainment terminal being dynamically programmed by a digital communication link. Where the terminal of Kostreski receives the executable software from the network over a digital link. The software is used to control interactions between the user and selected service providers.

However, Appellant’s claimed invention recites: a carousel having a plurality of modules each comprising at least one object that includes executable code (emphasis added).

Nowhere does Kostreski teach or suggest that the executable software is contained in a module of a carousel as claimed by Appellants. In Kostreski the only description is that a digital

communications link must be established and the terminal receives the software from the network. There is no suggestion in Kostreski col. 4, lines 39-47 of a carousel having a plurality of modules each comprising at least one object that includes executable code.

Reviewing Kostreski's col. 5, line 33 through col. 6, line 6 again finds no suggestion of Appellants' claimed feature. Kostreski is only describing the downloading of channel maps and the secondary table, also referred to as a data carousel. There is no suggestion of executable code as in claim 1.

Thus, contrary to the assertions in the final Office Action, nowhere does Kostreski teach or suggest Appellants' feature of "a carousel having a plurality of modules each comprising at least one object that includes executable code" as recited in claim 1.

The Examiner further argues on page 9 of the final Office Action that arguments against the references individually cannot show non-obviousness when the rejection is based on a combination of references. However, Appellants point out that according to the MPEP the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Clearly, Wasilewski is deficient in teaching this feature, as acknowledged in the BPAI decision of September 30, 2004. See page 11 of the decision, for example.

Even the Examiner admits that Wasilewski does not teach the claimed feature of a carousel having a plurality of modules each comprising at least one object that includes executable code; therefore, Kostreski must show or suggest such a feature. However, as shown above Kostreski is deficient in such teachings.

Therefore, Wasilewski and Kostreski, when combined, do not teach all of Appellants' features as recited in claim 1: there is no disclosure in the combination of references of "a carousel having a plurality of modules each comprising at least one object..." as recited in

Appellants' claim 1. Thus, the combination of cited references fail to render obvious the claimed invention and the rejection should be reversed.

Furthermore, analyzing the references according to the above roadmap for obviousness, with regard to motivation for combining the references, the Examiner offered an unsupported, conclusory remark that "it would have been obvious ...". It is not clear what the basis was for such an assertion. There is absolutely no motivation or suggestion to combine the references, except on the basis of the impermissible hindsight and knowledge gleaned from Appellants' invention.

The Examiner in attempting to support the motivation, in the "Response to Arguments" section of the final Office Action, by arguing: "In addition to the program delivery teaching of Wasilewski, Kostreski teaches using a carousel 5:60-6:6 and downloading executable code to control the customer interaction with the service provider to provide different services 4:39-67."

However, as point out above in this Brief, Kostreski does not provide any such teaching or suggestion. Thus, it is submitted that there is no motivation to make such a combination of references. Furthermore, picking and choosing elements from various references, while disregarding each reference as a whole, is clearly prohibited by the courts and cannot be sanctioned by the USPTO.

For at least the foregoing reasons, Appellants respectfully submit that claim 1 is not obvious in view of the combination of references and the rejection should be reversed.

2. Independent Claims 3, 5 and 7

The Examiner has rejected independent claims 3, 5 and 7 as being obvious in view of the combination of references Wasilewski and Kostreski using identical arguments as used in the rejection of claim 1 (see page 4 of the final Office Action).

Each of Appellants' independent claims 3, 5 and 7 include the feature of "a carousel having a plurality of modules, the modules each comprising at least one object that includes executable code."

Appellants essentially repeat the above arguments from claim 1 pointing out why each of the independent claims 3, 5 and 7 are not rendered obvious by the combination of Wasilewski and Kostreski.

Thus, for at least the foregoing reasons, Appellants respectfully submit that claims 3, 5 and 7 are not rendered obvious by the combination of Wasilewski and Kostreski and the rejection should be reversed.

4. Claims 2, 4, 6 and 8

Dependent claim 2 includes the features of "the module related information is contained in a single information section."

In the final Office Action the Examiner points to Wasilewski as disclosing a transmission system where module related information (Program Definition 2 on Fig. 4) is contained in a single information section (Program Number 74 on Fig. 4) of the transport stream 68.

However, Wasilewski only describes that the program number field 74 specifies the assigned program number for the program being defined. Thus, Wasilewski is only providing an assigned program number in item 74, in contrast Appellants claim the features of the module related information.

For example, as explained in Appellants' specification, page 3, by concentrating the module related pre-fetch information for all modules included in the transport stream into a single information section the receiver can quickly get a complete view of all pre-fetchable

modules included in the transport stream by simply reading this information section. In this way, the receiver can easily find out which modules it has to pre-fetch.

The combination of references fail to teach or suggest Appellants' claimed features, thus, the rejection should be reversed.

The Examiner has rejected dependent claims 4, 6 and 8 using identical arguments as used in the rejection of claim 2 (see page 5 of the final Office Action). Appellants essentially repeat the above arguments from claim 2 pointing out why claims 4, 6 and 8 are not obvious in view of the cited combination of references.

In addition, claim 2 depends from claim 1, claim 4 depends from claim 3, claim 6 depends from claim 5, and claim 8 depends from claim 7. They each include all the limitations of their respective independent claim. Accordingly, claims 2, 4, 6 and 8 are also allowable by virtue of their dependency, as well as the additional subject matter recited therein and the rejections should be reversed.

5. Claims 10, 11 and 13

Claims 10, 11 and 13 depend from claim 1 and each includes all the limitations of claim 1. The Examiner provides no further information as to the features in claim 1 which are lacking in the combination of cited references. Accordingly, claims 10, 11 and 13 are also allowable by virtue of their dependency, as well as the additional subject matter recited therein and the rejections should be reversed.

D. Claim 14 is not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Wasilewski in view of Kostreski in further view of Cobbley.

1. Claims 14

Claim 14 depends from claim 13, which depends from claim 1. Claim 14 includes all the limitations of claims 1 and 13. The Examiner provides no further clarification of the elements recited in claim 1 but missing in the combination of Wasilewski and Kostreski.

Furthermore, claim 14 recites: “each module includes version-identifying information, and the receiver does not pre-fetch a module if the receiver has a stored module having the same pre-fetch tag and version-identifying information.”

The Examiner admits the features are not found in Wasilewski and Kostreski but points to Cobbley col. 9, lines 20-45. However, Cobbley is only describing versions of broadcasted programs and terminating delivery of old versions of the programs. There is no description in Cobbley of each module of a carousel including version-identifying information and the receiver does not pre-fetch a module if the receiver has a stored module having the same pre-fetch tag and version-identifying information. Thus, claim 14 includes features not found in the combination of cited references.

Accordingly, claim 14 is also allowable by virtue of its dependency, as well as the additional subject matter recited therein, thus the rejection should be reversed.


CONCLUSION

In light of the above, appellant respectfully submits that the rejection of claims 1-8 and 10-14 is in error, legally and factually, and must be reversed.

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1.(previously presented): A transmission system for transmitting a multiplex signal from a transmitter to a receiver, said multiplex signal comprising a carousel having a plurality of modules each comprising at least one object that includes executable code, the receiver comprising extracting means for extracting objects from the multiplex signal, wherein the extracting means are embodied so as to extract the objects in dependence on module related information present in the multiplex signal.

2.(previously presented): A transmission system according to Claim 1, wherein the module related information is contained in a single information section.

3.(previously presented): A transmitter for transmitting a multiplex signal, said multiplex signal comprising a carousel having a plurality of modules, the modules each comprising at least one object that includes executable code, wherein the transmitter is embodied so as to insert in the multiplex signal module related object extraction information.

4.(previously presented): A transmitter according to Claim 3, wherein the module related object extraction information is contained in a single information section.

5.(previously presented): A receiver for receiving a multiplex signal, said multiplex signal comprising a carousel having a plurality of modules, the modules each comprising at least one object that includes executable code, the receiver comprising extracting means for extracting

objects from the multiplex signal, wherein the extracting means are embodied so as to extract the objects in dependence on module related information present in the multiplex signal.

6.(previously presented): A receiver according to Claim 5, wherein the module related information is contained in a single information section.

7.(previously presented): A multiplex signal, embodied in a computer readable medium, comprising a carousel having a plurality of modules, the modules each comprising at least one object that includes executable code, wherein the multiplex signal further comprises module related object extraction information.

8.(previously presented): A multiplex signal according to Claim 7, wherein the module related object extraction information is contained in a single information section.

9. (canceled)

10.(previously presented): A transmission system according to Claim 1, wherein each module includes a pre-fetch tag.

11.(previously presented): A transmission system according to Claim 1, wherein the module related object extraction information is a set of one or more pre-fetch tags.

12.(previously presented): A transmission system according to Claim 1, wherein the module related object extraction information is contained in the userInfo field of a DSM-CC DownloadInfoIndication message.

13.(previously presented): A transmission system according to Claim 1, wherein each module includes a pre-fetch tag, wherein the module related object extraction information is a set of one or more pre-fetch tags, and the extraction means pre-fetches modules having a pre-fetch tag that is in the set of pre-fetch tags.

14.(previously presented): A transmission system according to Claim 13, wherein each module includes version-identifying information, and the receiver does not pre-fetch a module if the receiver has a stored module having the same pre-fetch tag and version-identifying information.

IX. EVIDENCE APPENDIX

No evidence has been submitted pursuant to §§ 1.130, 1.131, or 1.132 of this title nor any other evidence entered by the examiner and relied upon by appellant in the appeal.

X. RELATED PROCEEDINGS APPENDIX

Appellant is not aware of any appeals or interferences related to the present application.